

Application No.: 09/915,936

Docket No.: IIW-006RCE2

AMENDMENTS TO THE CLAIMS**Please amend claims 12-14 as follows.**

1. (previously presented) A process for controlling a fuel cell system comprising a fuel cell, which generates power by reacting anode gas and cathode gas supplied to the fuel cell, a compressor which varies a rotation number thereof to thereby control an amount of the cathode gas to be supplied to the fuel cell, and a pressure control valve which varies an opening thereof to thereby control a pressure of the cathode gas, wherein the pressure control valve is provided downstream of a cathode of the fuel cell,

said process comprising:

first controlling said compressor to change an amount of the cathode gas supplied to the fuel cell at a start of a transition period of said fuel cell, and thereafter changing an opening of said pressure control valve, depending on the changed amount of the cathode gas, to thereby regulate the pressure of the cathode gas, wherein an amount of power generated from the fuel cell is changed during the transition period,

wherein the opening of the pressure control valve for controlling the pressure of the cathode gas is decreased during a first period of the transition period, and thereafter the opening of the pressure control valve is increased following an increase of the cathode gas flow amount.

2-6. (canceled)

7. (previously presented) A process for controlling a fuel cell system comprising a fuel cell, which generates power by reacting anode gas and cathode gas supplied to the fuel cell, a compressor which varies a rotation number thereof to thereby control the amount of the cathode gas to be supplied to the fuel cell, and a pressure control valve which varies an opening thereof to thereby control a pressure of the cathode gas, wherein the pressure control valve is provided downstream of a cathode of the fuel cell,

said process comprising:

controlling a power generation amount of the fuel cell by first controlling the compressor to change the flow amount of the cathode gas at a start of a transition period of the fuel cell and thereafter controlling an opening of the pressure control valve to change the pressure of the

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cathode gas compressively transferred into a cathode inlet side of the fuel cell depending on the changed amount of the cathode gas, and

controlling said pressure of the cathode gas to be a target gas flow amount corresponding to the detected gas flow amount, which is gradually changed, during the transition period of said fuel cell, wherein an amount of power generated from the fuel cell is changed during the transition period,

wherein the opening of the pressure control valve for controlling the pressure of the cathode gas is decreased during a first period of the transition period, and thereafter the opening of the pressure control valve is increased following an increase of the cathode gas flow amount.

8. (previously presented) The process as claimed in Claim 1, wherein a pressure feedback control operation for controlling the pressure of the cathode gas to be a prescribed value is avoided in the transition period of the fuel cell.

9-10. (canceled)

11. (previously presented) The process as claimed in Claim 1, wherein the amount of the cathode gas is increased in the transition period.

12. (currently amended) The process as claimed in Claim 11, wherein ~~the opening of the pressure control valve is decreased to increase the pressure of the cathode gas is increased~~ during the first period of the transition period ~~because a response of the compressor is slower than that of the pressure control valve.~~

13. (currently amended) The process as claimed in Claim 12, wherein ~~the opening of the pressure control valve of the cathode gas is increased~~ during a second period of the transition period following the first period of the transition period ~~where the response of the compressor catches up with that of the pressure control valve.~~

14. (currently amended) The process as claimed in Claim 13, wherein increasing the opening of the pressure control valve is increased during the second period of the transition

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~~period to prevent~~ prevents an excessive increase in the pressure of the cathode gas during the second period of the transition period.

15-16. (canceled)

Please add new claims 17-19 as follows.

17. (new) The process as claimed in Claim 1, wherein the amount of the cathode gas is increased to a target amount of the cathode gas at an end of the transition period.

18. (new) The process as claimed in Claim 17, wherein if the amount of the cathode gas is increased to the target amount of the cathode gas, the pressure control valve is controlled based on a feedback pressure of the cathode gas so that the pressure of the cathode gas reaches a target pressure of the cathode gas.

19. (new) The process as claimed in Claim 1, wherein a response of the compressor is slower than a response of the pressure control valve.